

REMARKS

Reconsideration is respectfully requested in view of the remarks made herein. Claims 1, 4-19, 21 and 22 remain pending. Claims 1 and 19 are independent claims and have been amended. No new matter has been added.

Claims 1 and 19 stand rejected under 35 USC 102(e) as being anticipated by Machida et al., U.S. Pub. No. 2004/0252361, hereinafter (Machida).

Applicants respectfully disagree with, and explicitly traverse, the examiner's reason for rejecting the claims.

Claim 1, as amended and with emphasis added, recites:

1. (Currently amended) An electrophoretic display panel for displaying a picture and subsequently displaying a subsequent picture comprising:
 - a pixel having
 - an electrophoretic medium comprising first and second charged particles, the first charged particles having a first optical property, the second charged particles having a second optical property different from the first optical property, the first and the second charged particles being able to occupy positions in a common region of the pixel, the common region comprising at least three substantially separate sub-regions;
 - an optical state depending on the positions of the particles in the common region, and
 - transition control means comprising:
 - electrodes for receiving potentials, each one of the electrodes being associated with one of the sub-regions, and
 - drive means being arranged to control the potentials to control the transition of at least a first number of the first particles and at least a second number of

the second particles being in respective separate sub-regions of the common region for displaying the picture, to separate sub-regions of the common region for displaying the subsequent picture,

wherein the transition control means are further arranged to control the first number of the first particles and the second number of the second particles to always be in separate sub-regions of the common region during the transition.

Applicants have amended claims 1 and 19 to recite that the respective first and second particles are always maintained in separate sub-regions during the transition. While Applicants felt this “always” feature was inherent in the claim language, it has been explicitly added to more clearly define the claimed invention in terms which overcome the prior art.

The specification at paragraph [0013] essentially recites the last paragraph of the previous version of claim 1:

[0013] The object is thereby achieved that the transition control means are further able to control the first number of the first particles and the second number of the second particles to be in separate regions in the common region during the transition.

The subsequent paragraph of the specification elaborates on this feature of the invention and the advantages attained over the prior art:

[0014] As a result, the first number of the first particles and the second number of the second particles are **not only in unmixed states for displaying the picture**, but

the particles are held in unmixed states also during picture update [emphasis added] and are therefore able to reach unmixed states for displaying the subsequent picture. Therefore, the process of mixing and subsequently unmixing the first number of the first particles and the second number of the second particles during picture update taking place in the disclosed electrophoretic display panel, is omitted during picture update in the display panel according to the invention. As a result, the picture update process in the display panel according to the invention is independent from differences in electrophoretic mobilities of the first and the second particles. ...

Applicants submit that Machida fails to teach a control means that is arranged for the displaying of a picture and the transition between two pictures without bringing two types of particles in the same region at the same time. With the amendment to claim 1 and the above discussion as to the meaning of this claimed feature, Applicants maintain that the following arguments (previously presented in Applicants' January 5, 2011 Amendment and found "not persuasive") now more clearly distinguish Machida.

Paragraph 5 of the Office Action (page 5, 1st paragraph) points to Figs. 2-6 and paragraphs 0079-0087 of Machida as teaching this feature of the invention. Applicants respectfully disagree, as Figs. 2-6 merely show various viewing states in which certain display colors are attained. Paragraphs 0079-0087 merely describe how applying various voltages to the display's electrodes will attain the resulting colors. These cited passages of Machida fail to address the feature of claim 1 that "the transition control means are further arranged to control **the first number of the first particles and the second**

number of the second particles to always be in separate sub-regions of the common region during the transition.”

By way of example, paragraph [0079] in describing Fig. 2 states how voltages applied to electrodes 7a and 7c will result in the appropriate particles adhering to one of these electrodes. Similarly, paragraph [0080] in describing Fig. 3 again states how an application of voltages to the appropriate electrodes will yield the pictured result – again, there is no description of how this transition comprises controlling the first and second particles to always be in separate sub-regions. While paragraph [0080] does begin with the language “From this state,” this clause is not intended to mean that the results depicted in Fig. 3 are attained only from a transition from the state of the particles depicted in Fig. 2 (or from any other state having respective particles in separate sub-regions). Moreover, it does not teach how or if the transition occurs without any mixing of the respective particles occurring in any interim state. This is evidenced by the fact that paragraph [0028] in describing Fig. 3, merely mentions attaining the resulting color by an application of voltages. Fig. 2 is not referenced. Moreover, Fig. 1, which depicts the respective particles being mixed throughout all sub-regions, is referenced.

FIG. 3 is a view showing, in the image display medium shown in FIG. 1, a state which can display white, **when a voltage of -50 V is applied to the electrode 7a of the rear face plate 2, 0 V is applied to the electrode 7b and -50 V is applied to the electrode 7c** [emphasis added]

Accordingly, there is nothing in referenced paragraphs 0079-0087, or anywhere else in Machida, which teaches that various display states are attained in a manner in which

transitions occur in the manner claimed -- the first number of the first particles and the second number of the second particles to always be in separate sub-regions of the common region during the transition.

Further, Applicants submit that Machida's movement of particles by the simple application of voltages as taught in paragraphs 0079-0087 in fact teaches away from this feature of claim 1. This is particularly evidenced by paragraph [0084] which describes the transition from Fig. 5 to Fig. 6:

Then, as shown in FIG. 6, if voltages of -50 V are applied to the electrodes 7a and 7b of the rear face plate 2 and +50 V is applied to the electrode 7c, the white particles 5 which have been adheringly held on the electrode 7b and the black particles 4 which have been adheringly held on the electrode 7c will exchange respective places. As a result, after this, the black particles 4 which are adheringly held on the electrode 7b of the rear face plate 2 can be observed from the display plate 1 side. Thus, black display is implemented.

Simply reviewing the relative positions of the particles in Fig. 5 and Fig. 6 indicates that Machida fails to address the claim feature "the first number of the first particles and the second number of the second particles to always be in separate sub-regions [emphasis added] of the common region during the transition." That is, Machida fails to teach or even suggest how items 5 move from electrode 7b to electrode 7c and items 4 move from electrode 7c to electrode 7b in a manner that particles 5 and 4 are always in separate sub-regions, and thus unmixed during this transition. Moreover, Applicants submit that the transition from the respective particle states of Fig. 5 to those of Fig. 6 as taught by

paragraph [0084] actually precludes the first and second particles from being in separate sub-regions during the transition.

A claim is anticipated only if each and every element recited therein is expressly or inherently described in a single prior art reference. Machida cannot be said to anticipate the present invention, because Machida fails to disclose each and every element recited. As shown, Machida fails to disclose the limitation of the “the transition control means are further arranged to control the first number of the first particles and the second number of the second particles to always be in separate sub-regions of the common region during the transition” as is recited in claim 1. Claim 19 also contains this feature and is deemed patentable over Machida for at least the same reasons.

Having shown that Machida fails to disclose each and every element claimed, applicants submit that the reason for the Examiner's rejection of claims 1 and 19 has been overcome and can no longer be sustained. Applicants respectfully request reconsideration, withdrawal of the rejection and allowance of claims 1 and 19.

With regard to claims 4-18, 21 and 22, these claims ultimately depend from claim 1 or claim 19, which have been shown to be not anticipated and allowable in view of the cited references. Accordingly, claims 4-18, 21 and 22 are also allowable by virtue of their dependence from an allowable base claim. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual

consideration or reconsideration, as the case may be, of the patentability of each on its own merits is respectfully requested.

Applicants deny any statement, position or averment stated in the Office Action that is not specifically addressed by the foregoing. Any rejection and/or points of argument not addressed are moot in view of the presented arguments and no arguments are waived and none of the statements and/or assertions made in the Office Action is conceded.

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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